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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/739,224	12/19/2003	Tetsuya Takeshita	118106	8470
25944	7590	11/01/2007		
OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850			EXAMINER JERABEK, KELLY L	
			ART UNIT	PAPER NUMBER
			2622	
			MAIL DATE	DELIVERY MODE
			11/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/739,224

Applicant(s)

TAKESHITA, TETSUYA

Examiner

Kelly L. Jerabek

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 8/15/2007 have been fully considered but they are not persuasive.

Response to Remarks:

Applicant's arguments regarding claim 1 (Amendment pages 5-6) state that both the Maeda and Minakuti references fail to disclose storing the color gain as an amount of white balance adjustment to be carried out on an image data generated by the image pickup part. The Examiner respectfully disagrees. Maeda discloses a colorimetric calculation part (22) for obtaining a colorimetric result from an ambient light colorimetric part (20) in synchronization with colorimetric timing, for calculating color gain (T) that brings the colorimetric result near achromatic (white) (page 3, paragraphs 35-36), and for storing said color gain (T) as an amount of white balance adjustment (17) to be carried out on an image data generated by an image pickup part (5) (page 3, paragraphs 35-36). Maeda states that color gain (T) is calculated by the colorimetric

calculation part which is an image processor (22), therefore it is inherent that the image processor (22) will store the color gain (T) that is calculated in order to perform a white balance adjustment.

Applicant's arguments regarding claim 1 (Amendment pages 5-6) state that since the colorimetric measurement and subsequent color gain calculation of Maeda is dependent on automatic, non-user obtainable factors, a user activated switch is not necessary and therefore there would have been no motivation to combine the switch of Minakuti with the disclosure of Maeda. The Examiner respectfully disagrees. In claim 1, the Minakuti reference is cited for the sole purpose of providing the teaching of receiving an instruction for colorimetric timing from a user. Minakuti et al. discloses a digital camera and a colorimeter capable of transmitting a color component value to the digital camera. Minakuti states that the colorimeter (2) includes a colorimetric switch (27) that may be pressed by a user in order to activate a colorimetric sensor (24), detect a color component value of incident light and subsequently transmit the color component value to the digital camera (1) so that the camera may perform white balance correction (Page 5, paragraph 93-page 6, paragraph 114). Therefore, it would have been obvious for one skilled in the art to have been motivated to include a user-actuable colorimetric switch as disclosed by Minakuti in the digital still camera including an ambient light colorimetric sensor disclosed by Maeda. Doing so would provide a means for allowing a user of a camera including a colorimetric sensor to press

a button in order to activate or deactivate the colorimetric sensor depending on the user's intended use of the camera.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda US 2003/0058351 in view of Minakuti et al. US 2003/0076424 and further in view of Spaulding et al. US 5,805,213.

Re claim 1, Maeda discloses an electronic still camera comprising: an image-pickup part (CCD 5) for capturing an image of light passing through a photo-taking lens (1) to generate color image data (figure 1; page 2, paragraph 19); an ambient light colorimetric part (20) for measuring color of ambient light without passing through the photo-taking lens (1) (page 2, paragraph 22); a colorimetric calculation part (22) for obtaining a colorimetric result from an ambient light colorimetric part (20) in synchronization with colorimetric timing, for calculating color gain (T) that brings the colorimetric result near achromatic (white) (page 3, paragraphs 35-36), and for storing

said color gain (T) as an amount of white balance adjustment (17) to be carried out on an image data generated by an image pickup part (5) (page 3, paragraphs 35-36).

Maeda states that color gain (T) is calculated by the colorimetric calculation part which is an image processor (22), therefore it is inherent that the image processor (22) will store the color gain (T) that is calculated in order to perform a white balance adjustment.

Maeda further discloses a white balance adjustment part (17) for carrying out white balance adjustment of the image data with the use of the color gain (Ts) stored in the colorimetric calculation part (page 2, paragraph 26-page 3, paragraph 36). In addition, Maeda states that the image pickup part (5), the ambient light colorimetric part (20), the colorimetric calculation part (22) and the white balance adjustment part (17) are all part of the camera therefore it is inherent that they are all disposed in the housing of the camera. However, although the Maeda reference discloses a digital camera including an ambient light colorimetric sensor including all of the above limitations, it fails to specifically state that the camera includes an operation member for receiving an instruction for a colorimetric timing of the ambient light from a user.

Minakuti et al. discloses a digital camera and a colorimeter capable of transmitting a color component value to the digital camera. Minakuti states that the colorimeter (2) includes a colorimetric switch (27) that may be pressed by a user in order to activate a colorimetric sensor (24), detect a color component value of incident light and subsequently transmit the color component value to the digital camera (1) so that the camera may perform white balance correction (Page 5, paragraph 93-page 6, paragraph 114). Therefore, it would have been obvious for one skilled in the art to have

been motivated to include a user-actuatable colorimetric switch as disclosed by Minakuti in the digital still camera including an ambient light colorimetric sensor disclosed by Maeda. Doing so would provide a means for allowing a user of a camera including a colorimetric sensor to press a button in order to activate or deactivate the colorimetric sensor depending on the user's intended use of the camera. Although the combination of the Maeda and Minakuti references discloses all of the above limitations the Maeda reference fails to specifically state that the ambient light colorimetric part (20) is disposed on a front wall of the camera housing.

Spaulding discloses a digital camera for performing color correction. Spaulding states that it is well known to mount an optical color temperature detector on the front wall of a camera in order to determine an illuminant incident on a scene (col. 6, lines 56-59). Therefore it would have been obvious for one skilled in the art to have been motivated to mount the ambient light colorimetric part (20) disclosed by the combination of the Maeda and Minakuti references on the front wall of the camera housing as disclosed by Spaulding. Doing so would provide a means for determining an illuminant that is incident on the front portion of a camera and therefore measuring ambient light in the area that an image is typically captured.

Re claim 2, Maeda states that the colorimetric calculation part holds a difference in spectral characteristics between the image pickup part (CCD 5) and the ambient light colorimetric part (20) as correction data, to correct an error occurring in the white balance adjustment in accordance with the correction data (if achromatic data extracted

from an image stored in memory does not reach a predetermined amount, external measurement data is supplied to the image processor (22) in order to correct the color temperature obtained from the image data) (page 2, paragraph 26-page 3, paragraph 36).

Re claim 3, the combination of the Maeda, Minakuit and Spaulding references discloses all of the limitations of claim 1 above. However, although Maeda discloses a colorimetric calculation part (22) for obtaining a colorimetric result from an ambient light colorimetric part (20) and for calculating an storing color gain and bringing the colorimetric result near to achromatic color it fails to state that the colorimetric calculation part pre-stores respective correspondence relations between a colorimetric result of ambient light and an applicability of white balance adjustment carried out based on the colorimetric result, and when the colorimetric result from the ambient light colorimetric part turns out to be inadequate, the colorimetric calculation part gives a warning which indicates that the ambient light is inadequate to the white balance adjustment.

The digital camera and colorimeter system disclosed by Minakuti states that a difference between the color indicated by the colorimeter color component value and the color indicated by the incident light color component value is compared with a threshold which is predetermined by measurement and when the color difference is equal or larger than the predetermined threshold, a warning is displayed so that the colorimeter color component value is not used in white balance correction (Page 6,

paragraphs 112-115). Therefore, it would have been obvious for one skilled in the art to have been motivated to enable the colorimetric calculation part disclosed by Maeda to pre-store a threshold value and provide a warning indication as disclosed by the Minakuti reference. Doing so would provide a means for preventing color correction from being improperly performed (Minakuti: page 6, paragraph 116).

Re claims 4-5, the combination of the Maeda, Minakuti and Spaulding references discloses all of the limitations of claim 1 above. Additionally, the image sensor (CCD 5) serves as a TTL photometric part and a TTL colorimetric part that measures the luminance and color of light incident on the image pickup part. However, although Maeda discloses a colorimetric calculation part (22) for obtaining a colorimetric result from an ambient light colorimetric part (20) and for calculating and storing color gain and bringing the colorimetric result near to achromatic color it fails to state that when the colorimetric result from the ambient light colorimetric part turns out to be inadequate, the colorimetric calculation part gives a warning which indicates that the ambient light is inadequate to the white balance adjustment.

The digital camera and colorimeter system disclosed by Minakuti states that a difference between the color indicated by the colorimeter color component value and the color indicated by the incident light color component value is compared with a threshold which is predetermined by a measurement and when the color difference is equal or larger than the predetermined threshold a warning is displayed so that the colorimeter color component value is not used in white balance correction (Page 6,

paragraphs 112-115). Therefore, it would have been obvious for one skilled in the art to have been motivated to enable the colorimetric calculation part disclosed by Maeda provide a warning indication as disclosed by the Minakuti reference. Doing so would provide a means for preventing color correction from being improperly performed (Minakuti: page 6, paragraph 116).

Re claim 6, Maeda states that color temperature information T_s of the colorimetric sensor (20) and the color temperature information T_w calculated from the image data are weighted and a white balance control value is calculated on the basis of the weighted color temperature information (page 3, paragraphs 34-40). Thus, the weight applied to color temperature information T_s of the colorimetric sensor (20) will vary according to the color temperature information T_w calculated from the image data. Therefore, it can be seen that the colorimetric calculation part (22) obtains a plurality of colorimetric results (corresponding to the different applied weights) of the ambient light from the ambient light colorimetric part (20) to calculate an average value of the plurality of colorimetric results and obtains a color gain for white balance adjustment based on the average value of the colorimetric results.

Allowable Subject Matter

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Re claim 7, the prior art fails to teach or suggest "An electronic camera comprising: an image pickup part for capturing an image of light passing through a photo-taking lens to generate color image data; an ambient light colorimetric part for measuring color of ambient light without passing through said photo-taking lens; an operation member for receiving an instruction for a colorimetric timing of said ambient light from a user; a colorimetric calculation part for obtaining a colorimetric result from said ambient light colorimetric part in synchronization with said colorimetric timing, for calculating color gain that brings said colorimetric result near achromatic, and for storing said color gain as an amount of white balance adjustment to be carried out on an image data generated by said image pickup part; and a white balance adjustment part for carrying out white balance adjustment of said image data with said color gain stored in said colorimetric calculation part; wherein said image pickup part, said ambient light

colorimetric part, said operation member, said colorimetric calculation part and said white balance adjustment part are disposed in a same housing, in which said ambient light colorimetric part is disposed on a front wall of the housing, **wherein said ambient light colorimetric part is disposed to orient obliquely upward on a front wall of a part of said housing in which a pentaprism is housed.**"

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is **(571) 272-7312**. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on **(571) 272-7372**. The fax phone number for submitting all Official communications is **(571) 273-7300**. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at **(571) 273-7312**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ



LIN YE
SUPERVISORY PATENT EXAMINER